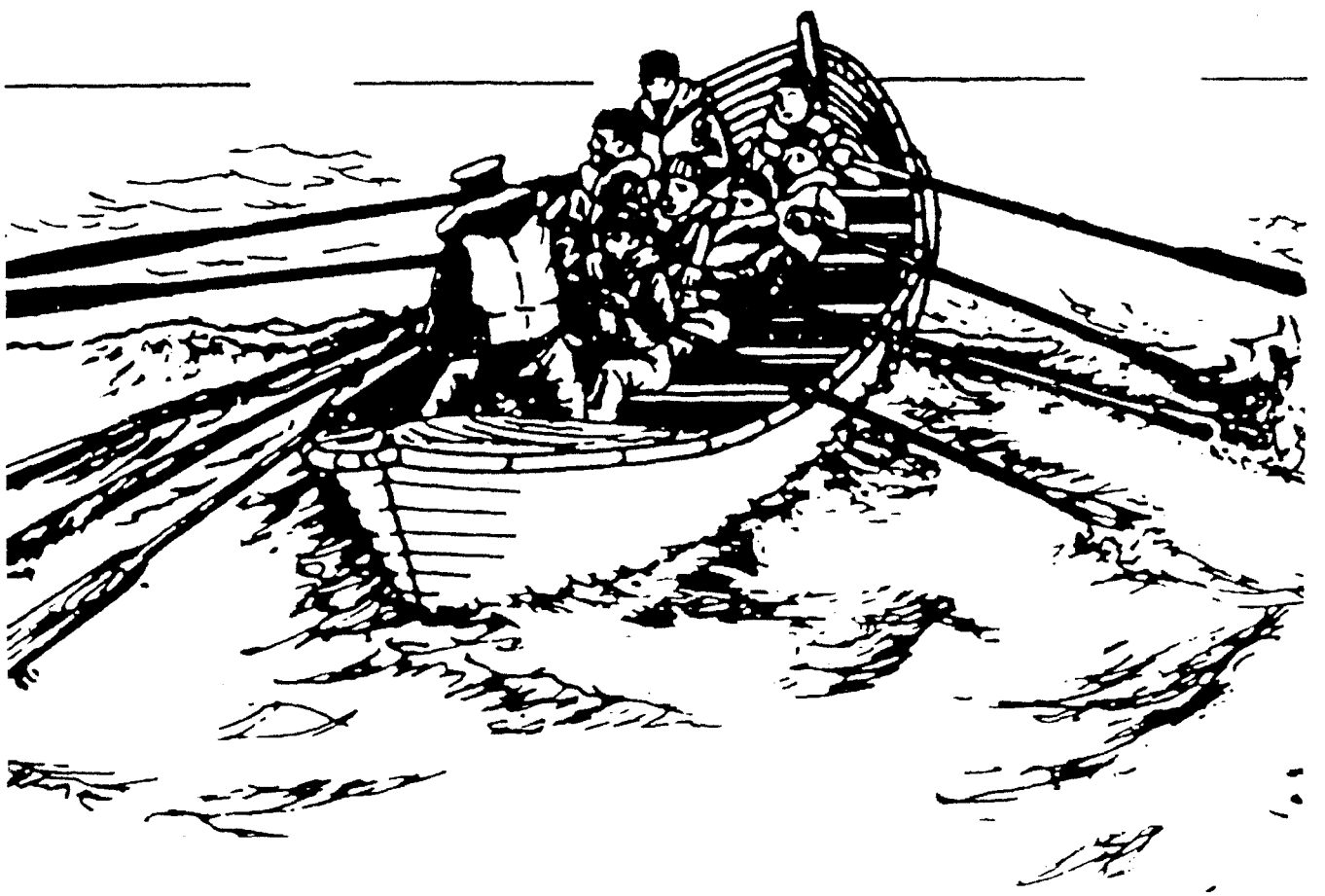
BOAT CREW

Seamanship Manual

COMDTINST M16114.5C

"Train, Maintain, Operate"



U.S. Department of Homeland Security

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COMDTINST M16114.5C
SEP 16 2003

COMMANDANT INSTRUCTION M16114.5C

Subj: BOAT CREW SEAMANSHIP MANUAL

1. PURPOSE. The Boat Crew Seamanship Manual presents the approved methods and procedures for the conduct of Coast Guard boat operations. The Coast Guard Auxiliary, for the conduct of vessel facility operations, also uses this Manual.

2. ACTION. Area and district commanders, commanders of maintenance and logistics commands, commanding officers of headquarters units, and assistant commandants for directorates, Chief Counsel, special staff offices at Headquarters, group commanders, boat unit commanding officers and officers-in-charge shall ensure the contents of this Manual are utilized in all boat operations where applicable. Internet release authorized.

3. DIRECTIVES AFFECTED. The Boat Crew Seamanship Manual, COMDTINST M16114.5B is canceled.

4. DISCUSSION.

   a. This update incorporates and standardizes the current best practices employed within the Coast Guard boat operations community. It is intended to be the primary reference for the Boat Crew Training Program and shore based boat operations and seamanship training.

   b. This text represents a major revision of the previous Boat Crew Seamanship Manual last released in February 1998. The format has been changed to present information in a more readable style while at the same time reducing the overall size of the Manual.

5. PROCEDURES. The standard methods and procedures presented in this Manual apply to all boat operations, crew training and certification.

   a. Commanding Officers/Officers-in-Charge shall ensure that personnel tasked with boat crew responsibilities are trained in all methods and procedures in this Manual.

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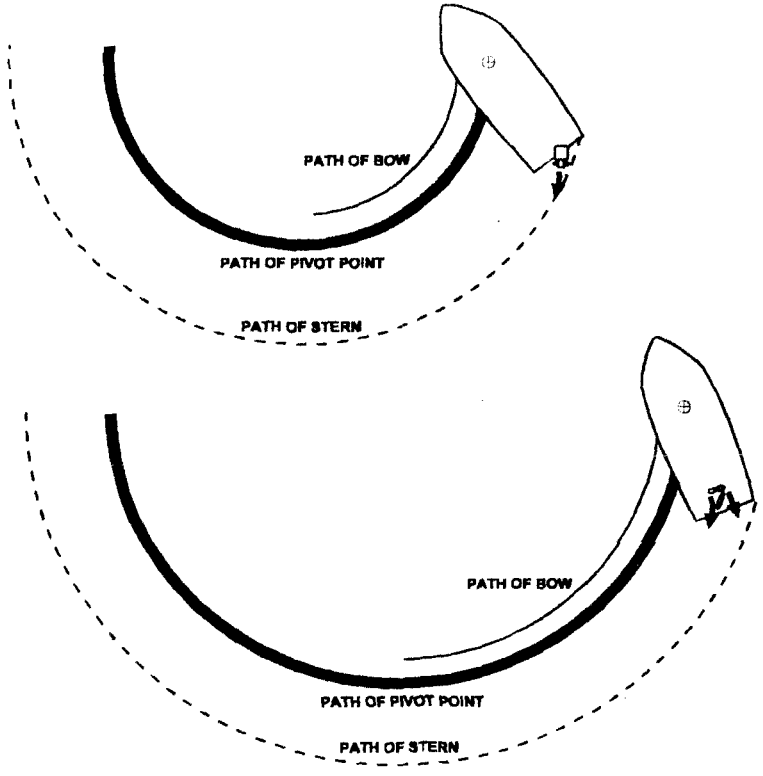

Figure 10-15
Pivot Point, Skid, Kick, Inboard vs. Outboard

B.16. Vessel's Turning Characteristics

When proceeding on a steady heading, putting the helm over to one side or the other, begins to turn the boat. Up to the time the boat turns through 90°, the boat has continued to advance in the original direction. By the time the boat has turned through 90°, it is well off to the side of the original track. This distance is transfer. As the boat continues through 180°, its path has defined its tactical diameter. If the vessel holds the turn through 360°, the distance it takes to reach the point where it first put the helm is referred to as its final diameter. For a particular vessel, these values vary for speed and rudder angle. (see **Figure 10-16)**

Developing a working knowledge of the vessel's turning characteristics will enable decision-making such as whether to make a particular maneuver in a certain space solely with the helm or whether other maneuvering tactics are needed. Learning when to ease the helm will help to prevent oversteering a course.

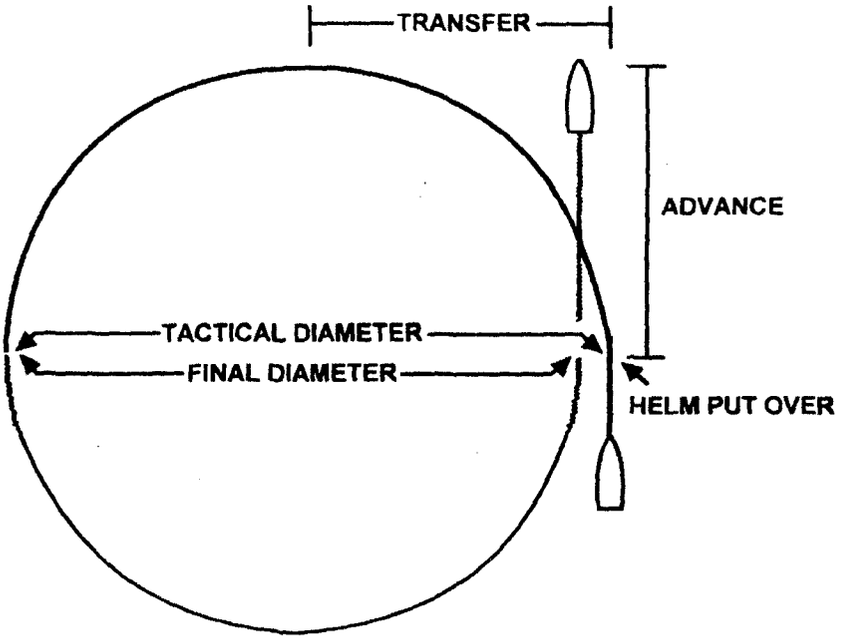

Figure 10-16
Turning Characteristics

WARNING

With light-displacement, high-powered craft, maximum helm at high speed will quickly stop a boat's progress in the original direction of movement. Though such a turning action is effective to avoid contact with an immediate hazard, the violent motion could eject unsuspecting crewmembers. Use this technique only as an emergency maneuver. Do not use this maneuver to demonstrate the boat's capability.

B.17. Loss of Speed

Some planing hulls and most semi-displacement craft will slow appreciably when turning at high speeds. As the boat heels into a turn, the hull provides less buoyancy to keep the vessel on plane at a given speed. Also, as the aft part of the hull skids across the water while in a heel, it presents a flat shape in the original direction of movement and pushes water outward. The bottom becomes a braking surface.